

Small Wonders

Registered Drop In Auto Sears & Auto Connectors

by Captain Monty Mendenhall

Once for once, Form Four registered Drop In Auto Sears (DIAS) and registered Auto Connectors (RAC) are worth five times their weight in gold. Recently (February of 1998), an example of the former was sold for \$2700. One of the latter brought \$2600. Why are they so valuable?

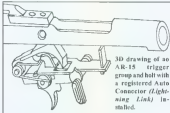
It is because each was registered with the Bureau of Alcohol, Tobacco and Firearms (BATF) as a machine gun before the cut off date of May 19, 1986. No machine guns that were made after that date may be transferred to an individual. DIAS and RAC can be used to legally convert a semi-automatic AR-15 type rifle to full auto. The fixed, limited, supply of transferable machine guns has caused their prices to increase dramatically.

There are also unregistered Drop In Auto Sears on the market (UDIAS). These are usually identified in "For Sale" ads as "pre-'81 Drop In Auto Sears."

What Is The Difference?

There is no physical difference at all between Pre-'81 and post-'81 drop in auto sears. They are identical. The only difference is in the way that they are treated by the BATF.

Until recently, the common wisdom was that pre-'81 DIASs are unregulated. As long as the owner of a pre-'81 DIAS did not also possess an AR-15, no laws were thought to have been violated. Unregistered post-'81 DIASs are treated by the BATF in the same way as unregistered machine guns. A recent court of appeals ruling may have erased this distinction however.



United States v. Cash

On July 23, 1998, the 7th Court of Appeals (Indiana, Illinois & Wisconsin) issued a ruling that could have a profound effect on the future status of pre-'81 unregistered Drop In Auto Sears. The Defendants-Appellants, William Cash and Michael Croyle were originally charged with selling 30 unregistered Drop In Auto Sears to a BATF undercover agent. Additionally, the defendants had agreed to sell the undercover agent another 37 unregistered DIASs, plus a silencer and two AR-15 semi-automatic rifles.

As part of a plea bargain, Cash and Croyle pleaded guilty to conspiring to possess and transfer the silencer. Cash was sentenced to 33 months imprisonment and Croyle to 37 months. The prison terms were calculated on the assumption that the sale of the Drop In Auto Sears was relevant (unlawful) conduct under the sentencing guidelines.

The Drop In Auto Sears that the defendants sold, lacked serial numbers and were unregistered. In their appeal, both defendants contended that the Drop In Auto Sears that they sold were pre-'81. Under BATF regulations, they contended, pre-'81 drop in auto sears are not treated as firearms and therefore should not have been a factor in setting the lengths of the defendants' sentences.

In its ruling on the defendants' appeal, the 7th Court stated, "The National Firearms Act, 26 U.S.C. 5843(b) defines "machinegun" to include any combination of parts designed and intended for use in converting a weapon to shoot automatically more than one shot, without manual reloading, by a single function of the trigger. With respect to the machinegun classification of the auto sear under the National Firearms Act, pursuant to 26 U.S.C. 7603(b), this ruling will not be applied to auto sears manufactured before November 1, 1981. Accordingly, auto sears manufactured on or after November 1, 1981, will be subject to all the provisions of the National Firearms Act and 27 C.F.R. Part 179."

The above paragraph seems to uphold the defendants' claim, but the Court continued, "(T)he Defendants believe that it places auto sears manufactured before November 1, 1981, outside all obligations laid by statute on the ownership and transfer of firearms. But nothing in the firearms statutes gives the Secretary of the Treasury (or the Bureau of Alcohol, Tobacco and Firearms) the power to make exemptions to section 5843(b) and associated legal obligations. The statute to which ATF Ruling 81-4 refers, 26 U.S.C. section 7603(b), provides that the Secretary



Registered auto Connector (Lightning Link) in foreground. Registered drop In Auto Sear in back.



Registered drop In Auto Sear. Note set screw on top right.

cannot give retroactive application to tax regulations and adds in section 7802(h)(9) that the "Secretary may prescribe the extent, if any, to which any ruling (as having any judicial decision or any administrative determination other than its regulation) relating to the internal revenue law shall be applied without retroactive effect."

"Read in conjunction with section 7803(h)(9), the proviso in the fourth paragraph of ATF Ruling 81-4 means only that the Secretary will not collect any tax under 26 U.S.C. sections 5801, 5811, or 5821 on account of auto sears manufactured or transferred before November 1, 1981. The ruling does not indicate an excuse compliance with criminal laws applicable at the time of post-1981 transfers (emphasis added)."

The 7th Court continued, "Each and every transferred auto sear in 1994 and 1993, when section 5845(b) and ATF Ruling 81-4 define auto sears as machine guns, they therefore had to comply with the laws regulating transfers, such as 26 U.S.C. section 5841(b) ("Each firearm transferred shall be registered to the transferee by the transferee.")"

OK, I Read It. What Does It Mean?

The 7th Court responded to the defendants' appeal in a way that may endanger anyone who has bought a pre-'81 DIAS since the BATF's original ruling on them in 1981.

Drop In Auto sears that were manufactured after November 1, 1981, must be registered and transferred as machine guns. Those that were registered after that date and before May 19 of 1986, are the Registered Drop In Auto Sears (RDIAS) that have recently been sold for \$2500.

The 7th Court's ruling states that the BATF's November 1, 1981 ruling is a tax matter. It applies to Drop In Auto Sears (machine guns) that were made after that date. The Court also stated that since this was a tax matter, the ruling could not be applied retroactively to collect taxes on the DIASs (machine guns) that were made before 11/1/81.

In its summary, the 7th Court stated, "Firearm dealers would do well to assume that all current transfers of auto sears must comply with the statute in matter when the devices were manufactured."

The Bottom Line

Pre-'81 Drop In Auto Sears are now considered to be machine guns (at least in Indiana, Illinois and Wisconsin). It must be assumed that all of the rules regarding the transfer of machine guns now apply to pre-'81 Drop In Auto Sears.

If an SAR reader bought a Drop In Auto Sear before November 1, 1981, and still has it in his possession, he may be safe for the moment (as long as he does not also own an AR15). The Court's decision only applied to post-'81 transfers of pre-'81 DIASs.

At this date, the 7th Court's ruling only

applies to Indiana, Illinois and Wisconsin. So far, the BATF has made no overt move to enforce the Court's decision, even in those states. This policy could change overnight however.

The BATF's position on unregistered drop in auto sears is ambiguous at best. On one hand, the 7th Court says that Section 26 of U.S.C. 5845(b) of the National Firearms Act, defines a Pre-'81 drop in auto sear as a machine gun. On the other hand, the BATF has allowed the unrestricted possession and transfer of pre-'81 unregistered DIASs (assuming that there is no simultaneous possession of an AR15). This is contrary to the BATF's position regarding all other unregistered machine guns.

SAR readers who live in Indiana, Illinois and Wisconsin must be extra cautious. If a resident of one of these states has bought (or sold) a pre-'81 Drop In Auto Sear since 11/1/81, then according to the 7th Court's ruling, he has committed a felony.

There never was a good reason to own a pre-'81 Drop In Auto Sear. One can not be used lawfully for its intended purpose. The 7th Court's ruling is just another reason to avoid them.

When Life Hands You A Lemon, Make Lemonade

The news regarding pre-'81 DIASs may not be all bad. The 7th Court's ruling might actually have a positive effect for



Registered drop In Auto Sear attached to AR-15 upper receiver take down log.

This much is known to be true. All

lawful machine gun owners. Many SAR readers are familiar with the BATF's ruling that changed the classification of "Street Sweepers" and USAS-12s from shotguns to Destructive Devices (DDs). In some ways, the BATF's ruling about them is similar to the 7th Court's ruling on pre-'81 drop in auto sears.

After the BATF declared that the two shotguns were DDs, an amnesty was declared. Owners of "Street Sweepers" and USAS-12s were allowed to register them without charge. Moreover, the BATF did not require the Chief Law Enforcement (CLEO) signature on the registration document.

The free, no CLEO, registration only applied to the person who owned the DD when the BATF made the new ruling. After making the ruling, it was unlawful to sell an unregistered "Street Sweeper" or USAS-12.

Unlike the "Street Sweeper" and USAS-12 ruling, the 7th Court, not the BATF, issued the rule. If the BATF does begin to enforce the 7th Court's pre-'81 Drop In Auto Sear ruling, then logically, the BATF should also declare an amnesty (with the CLEO signature waived) for those who acquired their DDs before 1981 and who have maintained continuous possession of them.

The author's personal opinion is that the BATF will do neither. Wayne Daniel stated that he manufactured and sold 30,000 Drop In Auto Sears before November 1, 1981. Numerous other manufacturers made and sold them as well. It is unlikely that the BATF wants to "grandfather in" another 30,000+ registered, transferable machine guns.

Another Opinion

Jim Jeffries is a highly respected attorney. His specialty is dealing with the BATF. Jeffries stated, "Money's interpretation is correct. The Seventh Circuit (IL, IN, WI) has ruled (correctly) that the BATF cannot amend the federal criminal code by administrative interpretation."

"Technically, under this decision, possession of any unregistered drop-in auto sear, regardless of date of manufacture, is illegal."

"Whether the government will adopt this position nationally (or even seek to implement it in the Seventh Circuit) is an open question. Frankly, BATF's pre/post



The Auto Connectors (Lightning Link's) short "Paddle" is placed correctly between the upper receiver's take down lug and the rear, forward face of the semi-auto bolt.

1981 position has never made any sense and if I had to guess, I'd guess that the government will begin to prosecute possession of unregistered auto sears regardless of the possession of an AR-15."

Registered Drop-In Auto Sears

The 7th Court's ruling does not effect the status of Registered Drop In Auto Sears, and registered Auto Connectors. Their owners need not be concerned.

Wayne Daniels is the former owner of SWD Inc, a Class Two manufacturer. He is probably best known as the manufacturer of Cobray™ M11 machine guns. In addition to making 30,000 pre-'81 Drop In Auto Sears (at an estimated cost of 79 cents each), between 1982 and 1986 he also made and registered 100 DDAs and 336 registered Auto Connectors (AC).

Mr. Daniels was very helpful in the preparation of this story. He stated that he believes that the inventor of the Drop In Auto Sear is Charles Sanchez. Mr. Sanchez was last known to be living in the Miami, Florida area. All efforts to contact him have been unsuccessful.

Auto Sears & Drop In Auto Sears

The Drop In Auto Sear operates precisely as does the pinned-in auto sear of a registered receiver M16. The DDAS is a small device. It has only four parts (the body, the sear, a pin and a spring). There is nothing remarkable about it, except that it attaches to a semi auto AR15 without the necessity of drilling any new holes in the AR15's receiver. To achieve full auto fire though, the AR15's semi auto parts (hammer, trigger, disconnector, safety and



A registered Auto Connector (Lightning Link) placed into an AR-15 lower receiver. Note how it is placed over the semi auto disconnector.

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bolt carrier) must be exchanged with M16 full auto parts. An experienced gunsmith only needs ten minutes to complete a full auto AR15 conversion using the RIDAS method.

The Auto Connector

The Auto Connector (often called a Lightning Link) was invented by a firearms design genius, Max Atchison. Though he is modest about his ability, Max Atchison has the gift of visualizing the internal workings of a mechanical device. In effect, he has x-ray vision.

Max Atchison visualized the inner workings of a semi auto AR15. In his mind, he watched it run in slow motion. Max noted a quirk in the relationship of three of the AR15's semi auto parts (bolt, disconnector and upper receiver takedown lug), that could be exploited to achieve full auto fire.

To exploit this quirk, Atchison cut two new parts out of flat sheet metal and linked them together. He placed them inside of a semi auto Colt "AR15 Sporter" and closed the upper receiver. Without drilling any new holes in the receiver or using any M16 parts, the Auto Connector equipped "AR15 Sporter" ran perfectly in full auto.

Atchison demonstrated the prototype of his invention to Wayne Daniel. Mr. Daniel liked it and agreed to pay royalties to Max.

Atchison for each Auto Connector that he manufactured. Later, Wayne Daniel bought the AC rights from Atchison.

A Minor Shortcoming

The simple, ingenious, Auto Connector has one minor shortcoming. It only produces full auto fire. There is no provision for semi auto fire. Most users do not find this to be a problem. If semi auto AR15 fire is desired, the Auto-Connector can be removed in ten seconds. It only takes about fifteen seconds to re-install it. If an Auto-Connector owner simply must have select fire capability, he can contact John Norrell. Norrell is a noted gunsmith and inventor. He invented and sells a kit, that when used in conjunction with Atchison's Auto Connector, allows selective semi auto and full auto fire.

The Auto Connector and the Drop In Auto Sear function on entirely different principles. A Drop In Auto Sear functions exactly like the pinned-in auto sear of a registered receiver M16. When a round is fired in full auto, the M16's full auto disconnector (located on opposite end of the pivoting auto sear) briefly engages the disconnector sear (located on top of the hammer). After the bolt has closed, the M16's bolt carrier strikes the pinned-in auto sear or the DIAS. Either auto sear then releases the hammer to fire another round. If the user holds the trigger back, the M16 or DIAS/AR15 will continue to fire until the ammo is exhausted.

A M16's semi auto mode of fire is independent of its full auto mode. In semi auto, M16s and AR15s function identically. Both have a semi auto disconnector sear that is located on the back-ender of the hammer. Both have a "hook shaped" disconnector to grasp the hammer's semi auto disconnector sear.

Max Atchison's Auto Connector functions in a semi auto AR15, not as an auto sear, but as an auto connector. In operation, the rectangular hole in the AC's long arm is placed around the AR15's semi auto disconnector. It rests on top of the safety. The AC's short vertical paddle is held behind the AR15's upper receiver takedown lug and rests against it.

When an Auto Connector equipped AR15 is fired, the AR15's semi auto disconnector engages the hammer's semi auto disconnector sear as usual. As the semi auto bolt closes, it pushes the AC's vertical paddle forward. The paddle pivots on the AR15's upper receiver takedown lug. This motion pulls the AC's long arm

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rearward. In turn, this causes the semi auto disconnector to release the hammer. Since the shooter is holding the trigger back, the hammer can not engage the trigger seat. It is free to fall and to continue firing.

When the shooter releases the trigger of an Auto Connector equipped AR15, the bolt carrier still causes the Auto Connector to pivot and release the hammer from the disconnector. The AR15 does not fire though. Just as in semi auto fire without the AC, when the trigger is in the forward position and the disconnector releases the hammer, the hammer is stopped by the trigger seat.

Drop in Auto Sears and Auto Connectors can not be installed in new Colt AR15 "Sporters". These later production semi autos have blocks installed in their receivers that prevent the insertion of a DIAS or AC.

Installing an Auto Connector

New owners of BATF registered Auto Connectors usually have difficulty when installing them in their AR-15s. There is a simple technique though that eases installation. Once this technique is learned, installation of the AC requires only fifteen seconds.

Here is the secret. Assemble the two pieces of the Auto Connector according to the picture. Push out the rear take down pin and open the AR15. With the hammer forward, place the AC over the "hook shaped" disconnector. Pull the AC rearward until it contacts the disconnector. Be sure that the vertical paddle tilts rearward.

Rotate the AR15's lower receiver downward about fifteen degrees (stock low). Partially close the upper receiver. Stop when the bolt is about 1/16 of an inch above the vertical paddle. While holding the upper and lower receivers in this position, rotate the entire unit in the opposite direction about 30 degrees. The stock will be high now and the AC's vertical paddle should fall forward and rest against the upper receiver's take down lag.

While holding the AR15 in this position, pull the cocking handle back slightly. Finish closing the upper receiver. The AC's vertical paddle will slip between rear face of the AR15's bolt and the upper receiver's take down lag.

After much use, the Auto Connector's vertical paddle may bend and the AR15 will cease to fire full auto. If that happens, remove the paddle. Place it on a hard, smooth, surface. Hammer it flat. Reinstall the AC and the AR15 will fire full

auto again.

Don't Try This At Home

Prior to May 19, 1986, and with prior BATF approval, an individual could file a Form One, pay a \$200 tax and legally manufacture a machine gun. The Auto Connector's simplicity appealed to some of these home hobbyists. The materials for making an Auto Connector were common and inexpensive. One could be made from a broken power hacksaw blade. An amateur, using only a vise and a Dremel tool, could manufacture one in an hour. Plans are available that give the exact dimensions of an Auto Connector. The readers of *Small Arms Review* should not be tempted to make one. The BATF has no patience with curious, but well-meaning, experimenters. Possession of an unregistered Auto Connector could mean ten years in prison (with the possibility a large, hasty settlement) plus a fine of ten thousand dollars.

Sources

John Norrell

2608 Crest Mill Rd

Little Rock, AR 72217

Select fire kits for Auto Connectors